American Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O Fortunatos nimium sua si bona norint
"Agricolas." . . . . *Virg.*

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THE AMERICAN FARMER.

EDITED BY JOHN S. SKINNER.

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Baldwin's Corn Crusher—*Exhortation to our readers—Imposters ought to be exposed.*—If any testimony were wanting, of the great value of this too litttle known implement, that testimony is fully supplied in the following communication. This is what may be called practical proof—the best sort of proof; and we cannot offer it without commending to the readers of this journal, the *example* of him to whose kindness we are indebted for it.

We doubt not, that every number of the American Farmer contains some theory, or some observations, on implements and courses of husbandry, described or recommended, on which some of our readers might make valuable remarks, either to confirm or refute what he sees, or to suggest perhaps some beneficial alteration or amendment. This paper, and others established for like purposes, are intended as repositories, for all classes of agriculturists, to send in their experience and their inquiries.—There are very, very few indeed, but might add something to the stock of useful information—and not the least useful would be communications to *expose false theories—to denounce humbug inventions and fraudulent impositions in seeds, fruit trees and animals.* Of the class of *agricultural frauds* few are more pernicious than those which are practised by *Nursery* and *Seedsmen*—the more pernicious, because they involve not only a loss of money invested, but of what is yet more valuable and irreparable, the loss of *time.*

The impositions practised by certain great establishments in regard to *fruit trees*, are enormous, and cry aloud for exposure. Those who have suffered by it are invited to make known the cases of deception and loss which have ensued, or which may hereafter ensue from trees badly put up, and from *false catalogues or false pedigrees.*

Those who may be guilty of wilful imposition in any of these matters, shall be exposed as we would advertise a horse-thief—regarding one as being entitled to the same *society*, and the same *place of residence* as the other.

These impostures in regard to seeds and trees, and especially the latter, have a tendency to retard very much, very desirable improvements in horticulture; whereas, such establishments, if conducted with fidelity and a *knowledge of the subject*, are calculated to be of *eminent public* utility! But frequent cheats disgust the farmer, and compel him, against interest and inclination, to give his time to rearing of his own seeds and trees—For this he is not generally well prepared with the necessary knowledge or conveniences—He would gladly, and could with economy, go to a public establishment, but there is a great chance that several years waiting would end in disappointment—From a peach or an apple, bearing a high sounding name, as the "Royal George" or the "Ladies blush," he may gather nothing but bitter fruit, fit only for hogs—and not even for them. Once more we say, let the honest seed and nurseryman be applauded and patronized, and his name and his establishment be proclaimed and honoured among the tillers of the soil, for he is an honorable contributor to the stock of good things, and to the most exquisite and innocent pleasures of life—Our good *Feasts* always call such men to our minds—Once more we invite, in every department, the aid of our readers, as correspondents—No one man has either knowledge or experience to write efficiently, on all the branches of a great art.

The Virginia Corn and Cob Crusher.

Mr. Skinner—Your notice in the Farmer of the 18th inst. of what we esteem one of the most valuable agricultural machines within our knowledge, has induced us to add our experience of two years in feeding work horses. Previous to the purchase of the Crusher, we averaged the daily consumption of 214 ears of corn. Our stock then and now number seven head. One hundred and sixty ears of the ordinary size are now run through the crusher—they make 2½ heaping bushels of crushed corn and cob. The different appearance of the horses, and their better ability to work, prove beyond a doubt, that the Crusher affords a more nutritious and healthy food. It will be seen it also places to our daily credit, 54 ears of corn, upwards of 30 barrels a year, worth at the average Baltimore price, nearly double the cost of the Crusher. You state that two men can do tolerable work with it—Our experience would say you are mistaken, unless you mean to select two of your stout-hearted and strong-handed Kentucky friends—Then, of course, we knock under. With four men to turn, and a boy to feed, from 4 to 5 bushels per hour can be crushed. To work the machine effectually and economically, it must have velocity, which cannot readily be effected by manual power. With a two horse power, a man to feed, and a boy to drive, 13 bushels of corn and cob can be crushed in one hour. The Crusher in question came from the manufactory of R. Sinclair, Jr. & Co. During the two years we have had it in use, and quite roughly, it has not cost one cent for repair, and is now in as good order as when purchased. The workmanship and material fairly considered, the machine is certainly not dear at $65. We have seen $150 given for a horse-power with about the same quantity of material as the Crusher, but not half the workmanship. If machinists would, as they certainly can, afford their work for less than their present prices, their increased sales would make them equally with the farmer the gainer by it. From the many evidences of the nutriment contained in the corn cob, the experiment by distillation of Mr. Minor, of Virginia, is decisive. (See American Farmer, Vol. 1, p. 324.) Mr. M. found 5 bushels of cob yielded 4 gallons of spirit—He also found other nutritive matter than the saccharine which is converted into alcohol, as mucilage and oils. Your friend,

Baltimore Co., Dec. 22, 1839. A. H. T

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On the value of the Cobbs of Corn as a food for Stock.

Ridgeway, May 1*st*, 1819.

Dear Sir,—More than twelve months ago, I was conversing with our esteemed friend and worthy member, John Patterson, upon the value of the corn cobb, ground up with the grain, as a food for stock. He suggested the idea of testing its nutritive strength by the process of distillation, which I undertook to do, and furnished him with the result, with a view of having it communicated to our Society. But he mislaid my letter, previous to his removal from Virginia, and as the experiment was very flattering, I venture to detail it to you, for the Society's information. It was carried on under the eye of an experienced and intelligent distiller, and was as follows.

Ten bushels of the corn and cobb ground together were taken, which weighed 367lbs, and ten bushels of pure corn meal were taken, which weighed 400lbs. They were both brewed or mashed on the same day and distilled separately, with great care and accuracy. The product of the pure corn was 18 gallons, and the product of the mixture, or corn and cob, was 13 gallons of spirit, each of the same degree of proof. Now, it is generally agreed that the cob constitutes about one half of the bulk of corn, in other words, we give two measures in the ears for one shelled, and the cobs are either used as fuel, or thrown away as of no value.—If this were true, the product of the mixture then, should have been only 9 gallons, which is the half of what the pure corn produced. But 13 were obtained, 4 of which must have been, of course, extracted from the cobbs; or if we estimate its nutritive power by the quantity of spirits, it is clear, that whenever we shell ten bushels of corn, and throw away the cobbs, we throw away a portion of food, equal to the difference between 9 and 13, or nearly one half.

As it relates to the respective weight of each, the difference in favor of the mixture, is still greater, the pure meal being more than three pounds heavier in the bushel, and I am inclined to think that the product of the mixture, would have been greater if the experiment had been made earlier in the year, before the cobbs had lost much of their substance by evaporation. (My experiment was made in the month of March.) The distiller mentioned an important fact, that occurred in the process. He found that the fermentation of the mixture took place much sooner, and was perfected a day or two earlier than the other. His expression, was, that it mashed much easier, and better than any thing he had tried before, and which he accounted for, by supposing that the particles of the cobb being lighter and coarser than those of the grain, but mixed together, prevented too close and heavy a deposition of the mass at the bottom of his brewing tub.

These facts are particularly worthy the attentton of distillers, and I think, are perfectly satisfactory, as to the value of corn cobbs in the production of spirits. Whether they are equally so in relation to their value as a food, is left to the chemists to determine. We are aware that the saccharine particles, or those yielding spirits, are not the only constituents of nourishment. We know that oil and mucilaginous particles are also component and necessary parts of food. But which preponderates, or in what proportion to each other, they are required to exist, in order to constitute a healthy food, I do not pretend to know. It is certain however, that the two latter do exist, in some degree, in the cobbs of corn; and since the experience of all who have tried it, concur in reporting it to be the most healthy mode of feeding corn, perhaps it will not be unfair to infer, that they maintain a due and proper proportion to the spirit. If so, the experiment must be satisfactory, and the conclusion I have drawn from it undeniable.

But besides the actual economy, there is another advantage in this way of feeding corn, which ought to engage the attention of every farmer. It is notoriously true, that the unground grain of corn, is heating to the stomach of all animals, and of difficult digestion, producing cholic, and other inflammatory disorders, particularly in horses, which tend greatly to shorten their lives. They are de-

prived of the benefits derived from the stimulus of distension, (so necessary to the proper health of all animals,) by being unable to eat a sufficient bulk to produce it befors they become gorged. But wen ground into meal, along with the cobs, and mixed with cut hay or straw of any kind, this necessary distension is produced, without any danger of disorders arising from eating too much.

It is now eight years since I have been in the habit of feeding corn in this way, and out of six to ten horses, which I have annually kept in that time, there has been but one case of sickness among them, which was a slight cholic.—Indeed since I have lived in this country, which is now eleven years, there has been but one death among that description of stock on my plantation, and that occurred to a mare with a young foal, in a distant cloverfield, without having been fed for many weeks, and which took place two or three days before it was known; this uncommon health of my horses, I attribute in a great degree to the use of ground food.

Yours with esteem and friendship, P. Minor.

General Cocke, Vice-President of the Agricultural Society of Albemarle.

The Ayrshire Cattle—A laudable ambition to possess the best cattle to be found in foreign countries, has led, within our observation, and since the establishment of this paper,—we will not say under its influence,—to the importation of the breeds most celebrated for beef—for the yoke—for quantity and for richness of milk—for hardiness—and for other qualities deemed most desirable, according to the circumstances of the importer—Within the time mentioned we have witnessed importations of the Holderness—of the improved Short-horn, of which the Holderness is the principal basis—the North Devons—the Alderney—the Tuscany—the Bakewell and the *Ayrshire*.

It is of this last breed we propose now to speak—All that is said in praise of it, in what we shall extract from the work on cattle, put forth by the society for the diffusion of useful knowledge, has been confirmed in a letter which we have recently received from our Minister at London, who has united with the best opportunities of observation, a most laudable disposition to improve them. In that praiseworthy spirit he has looked particularly at the various breeds of cattle, among other branches of British husbandry. We regret that we have not his last letter before us; it was sent to a friend in the west, as it contained some important suggestions, as to the liability of importers of Short-horns, to be imposed upon, in England, it being no easy matter to get genuine and the best specimens of that blood. Though Mr. Stevenson proposes to bring home with him samples of the various and most popular breeds, he gives, *for the dairy*, decided preference to the *Ayrshires*.

For ourselves we are of opinion that the Ayrshire, like the Short-horn, has been formed partly out of the Holderness. They possess the neatness and fine and flecked skin of the Short-horn; and may almost be called the Short-horn in miniature—their less size being probably attributable to less luxriant pasturage and keep; and for that very reason, we consider the Ayrshire to be preferable to the Short-horn, for all that region of country which we have heretofore described, and to which we think the *North Devon* better adapted than either, on account of its distinctness of breed, equal hardiness and better adaptation to, and fitness *for the yoke*. Without being unreasonably tenacious of our own opinion, however, or in the least intolerant of that of others, we deem it in some sort proper to express ours for *what it is worth*. All we ask is light and information; feeling every hour of our lives the want of them, and judging no other possessions comparable with them—for knowledge is not only power, but virtue—Our greatest want is expressed in the brief prayer of the Poet—

"Father of light and life! thou good supreme!
"O teach me what is good! teach me Thyself!
"Save me from folly, vanity and vice—
"From every low pursuit! and feed my soul
"With knowledge, conscious peace, and virtue pure;
"Sacred, substantial, never-fading bliss!"

Those who reside in the slave-holding Southern states, and who deem it not expedient or economical to rely on the ox, to labor in the cart or the plough, and whose objects are to get for domestic consumption, most meat and milk from a given and limited quantity of food, will probably be disposed to give the preference to the Ayrshires, *when to be had*.

Of this breed two importations have been made to this place within a few years, under circumstances giving assurance of the genuineness of the individuals—The first was some few years since by A. J. Davie, Esq., a gentleman of much taste and enthusiasm. They were selected by Mr. Davie himself, and were very beautiful—or at least we so thought them—possessing the lean, bony and small head of the Short-horn, with its soft skin and well-defined colors—its neat limbs and straight back; but hardly two-thirds the size. These passed into the hands of John Ridgely, Esq. and to his Hampton estate. A bull of that lot, or the produce of it, was lately sold by Dr. Hoffman to Mr. Singleton, of South Carolina, for $200, Mr. H. having lately imported a bull and some beautiful heifers from Ayrshire. We should have given the preference to Mr. Singleton's, the American born, over the imported bull.

From these limited importations into Maryland, it must be some years before they can pass into many other hands, and their qualities be well tested.

A bull calf by one of these bulls, out of a Devon cow was lately sold, cheaply, to Mr. Edelin, for $50, deliverable from the cow on the 1st May next, and another equally good, of same age, by the same bull, out of a fine thorough-bred Devon cow, may be had on the same terms.

We proceed to give some extracts from the work before referred to. In a subsequent number we shall make further extracts containing useful hints on the management of milch-cows, and the mode of rearing calves in Scotland.

We agree with Mr. Aiton, that the excellency of a dairy cow is estimated by the quantity and the quality of her milk. The quantity yielded by the Ayrshire cow is, considering her size, very great. Five gallons daily, for two or three months after calving, may be considered as not more than an average quantity. Three gallons daily will be given for the next three months, and one gallon and a half during the succeeding four months. This would amount to more than 850 gallons; but, allowing for some unproductive cows, 600 gallons per year may be considered as the average quantity obtained annually from each cow. We shall enter more into this presently.

The quantity of the milk is estimated by the quantity of butter or cheese that it will yield. Three gallons and a half of this milk will yield about a pound of butter, country weight, or a pound and a half avoirdupois; and when one gallon of water is added to four of milk, the butter-milk is worth to the farmer, or will sell at, 2*d*. per gallon. An Ayrshire cow, therefore, may be reckoned to yield 257 English pounds of butter per annum, or about five pounds per week all the year round, beside the value of the butter-milk and her calf.

When the calculation is formed, according to the quantity of cheese that is usually produced, the following will be the result:—twenty-eight gallons of milk, with the cream, will yield a stone (24 lbs.) of sweet-milk cheese, or 514 lbs. avoirdupois per annum, besides the whey and the calf.*

This is certainly an extraordinary quantity of butter and cheese, and fully establishes the reputation of an Ayrshire cow, so far as the dairy is concerned.†

* A Scotch pint is nearly two English quarts. An Ayrshire pound consists of 24 ounces, and sixteen of these pounds, or 24 lbs. avoirdupois, make one stone. Mr. Fullarton, in in his 'Statistical Account of Dulry,' in this county, states that in 1794, before the establishment of this improved Ayrshire cow, each cow would yield, on the average, in the course of the season, 18 stones, or 288 lbs. of sweet-milk cheese.

† In some experiments conducted at the Earl of Chesterfield's dairy at Bradley-Hall farm, it appeared that, in the height of the season, the Holderness would yield 7 gallons and a quart; the long horn and the Alderney, 4 gallons 3 quarts; and the Devon, 4 gallons 1 pint per day: and when this was made into butter, the result was, from the Holderness, 38¼ ounces; from the Devon, 28 ounces; and from the Alderney, 25 ounces. The Ayrshire yields 5 gallons per day, and from that is produced 34 ounces of butter.

It is the practice in many parts of Ayrshire to *let* the cows to a professed milkman at so much per cow per annum. This is provincially called a *bowing*, or *boyening*, from *boyen*, a milk pail. The farmer provides the cows and requisite dairy-vessels, the whole summer pasture and winter foddering, and houses and litter for the cows, and a habitation for the milkman; while the *boyener* takes the whole charge of the milking, and the management and disposal of the butter, or milk, or cheese, or whey, as he chooses. The price varies from 8*l*. to 15*l*. In the neighborhood of large towns it may be averaged at 15*l*.; and if to this be added the wages of a milkman or milkmaid for every eight cows, the whole expense of the cow will be 18*l*.; and the money received, at 10*d* per gallon, for 600 gallons, being but 26*l*. there will result only 7*l*. per annum profit on each cow; but this supposes that the milk of the cow is fairly disposed of without adulteration or trickery.‡ Mr. Aiton rates the profit of the Ayrshire cow at a higher value. He says, 'To sum up all in one sentence, I now repeat that hundreds and thousands of the best Scotch dairy cows, when they are in their best condition and well fed, yield at the rate of 2000 Scotch pints of milk (1000 gallons) in one year; that, in general, from 7½ to 8 pints (3¾ to 4 gallons) of their milk will yield a pound of butter, country weight (1½ lb. avoirdupois;) that 55 pints (27½ gallons) of their milk will produce one stone and a half imperial weight of full milk-cheese; that at the proper season, and when a healthy calf is fed, and the prices of veal as high as they have frequently been within the last fifteen years, milk will yield a profit in veal equal to 3½*d* or 4*d*. per pint (½ gallon;) and where the buttermilk can be sold that will yield a similar profit.

Mr. Rankine, the author of an excellent report of a Kyle farm (in the Reports of Select Farms, No. 2, Farmer's Series, No. 12,) and some of whose observations, with which we have been privately favored, we have embodied in our account of the Ayrshire cattle, very justly, we think, maintains that Mr. Aiton's statement is far too high, and his calculations not well founded. 'He deduces his statement,' says Mr. Rankine, 'from the circumstance of some farmers letting the milk of their cows for a year at 15*l*., which, taking 60 pints (half-gallons) to produce an Ayrshire stone (24 lbs.) of cheese, and the price being 10*s*., would require 2160 pints for each cow. But he is not warranted in inferring that the milk from which these rents were paid was all converted into cheese. I am convinced that no such rents were ever paid for

‡ Mr. Robertson gives a curious extract from the farm-book of Mr. David Blair, of Giffordland, in this county, dated 1743:—

'Mind that P. Lawson farmed 7 cows at 8 pounds each (13*s*. 3*d*. the Scots pound being equivalent to 1*s* 8*d*.) She entered to the milk on the 21st of May, to the end of harvest.

'She made of sweet milk cheese 9¾ stone, at 2*l*. 0*s*. 10*d*. £19 10 0

6¾ stone of butter, at 2*l*. 15*s*. 4*d*. 18 0 0

11½ stone, of common cheese, at 1*l*. 6*s*. 8*d*. 15 6 8

Milk and cream to the house 6 0 0

Scots £57 16 8

'She also sent ½ stone sweet-milk cheese to Glasgow, in a compliment.—*Rur. Recollec.*, p. 62.

The woman gaiend 2*l*. 16*s*. 8*d*. Scots, or 4*s*. 8*d*. by her bargain, and the system of *bowing* or *boyening* was not again attempted during the period of thirty-six years, which this book embraces.

This extract is interesting, as showing the improvement of the Ayrshire cow since that period. These cows were taken at the very height of the season; and yet, reckoning 9 Scotch pints for a pound of butter, or 4½ pints for a pound of cheese, and that the season lasted twenty weeks, they scarcely yielded 3 pints (1¼ gallon) each per day. It is a bad Ayrshire cow that does not now yield three times that quantity.

The same book, extending from 1729 to 1765, also records the amount of wages:—

	1729-1742.	1743-1759.	1760-1765.
A ploughman, yearly,	*l*.2 13 4	*l*.3 6 8	*l*.3 10 to *l*5
A maid servant,	1 6 8	1 10 0	1 10 to 2

In modern times, in that part of the country, the wages were as follows:

	1796.	1828.
A ploughman, yearly,	*l*.12 0 0 to 16 0 0	*l*.14 00 to 18
A maid servant,	5 0 0 to 6 0 0	9 00 to 9

cows where a considerable portion of the milk was made into cheese. In the vicinity of a town where the whole of the milk could be sold for 4*d.* a pint (half gallon,) 900 pints would bring 15*l.* Where the whole of the milk could have been turned to such an account, such rents might have been paid; but it is erroneous to calculate the quantity of milk given from the quantity of cheese required to enable a rent of 15*l.* to be paid. His first statement (page 110 of this work) that 1200 Scots pints (600 gallons) are yielded, though far above the average of all the cows in the country, may be too low when applied to the best selected stocks and on good land, but I have reason to believe that no stock of 20 cows ever averaged 1800 or 1700 pints (900 or 850 gallons) each in the year. I have seen eighteen pints (9 g.) of milk drawn from a cow in one day. I had a three-year-old quey that once, for six weeks after calving, gave 14 pints (7 gallons) a day. The dairymaid predicted that there "had been o'ermuckle talk about her, for ony luck to come of her," and she soon afterwards received an injury in her udder, which caused one of her quarters to become dry of milk. These, however, are rare instances.'

'I quote with confidence,' Mr. Rankine proceeds, 'the answers to queries which I sent to two individuals. The first is a man of superior intelligence and accuracy, and who has devoted himself very much to dairy husbandry. He keeps between twenty and thirty cows, and his stock has for many years been the handsomest I ever saw, and his farm being close to a small town, he had every inducement to keep them in the highest condition that is requisite for giving the largest produce in milk. He states that, at the best of season, the average milk from each is 9 Scots pints (4½ gallons,) and in a year 1300 Scots pints (650 gallons;) that in the summer season 64 pints (32 gallons) of entire milk will make an Ayrshire stone (24 lbs.) of cheese; and 96 pints (48 gallons) of skimmed milk will produce the same quantity: and that 180 pints (90 gallons) will make 24 lbs. of butter.

Another farmer, in a different district of this county, and who keeps a stock of between 20 and 40 very superior cows, and always in condition, states that the average produce of each is 1375 pints (687½ gallons.) My belief, on the whole, is, that although there may be Ayrshire cows capable of giving 1800 pints in the year, it would be difficult to bring half a score of them together; and that in stocks of the greater number most carefully selected, and liberally fed, from 1300 to 1400 pints is the very highest produce of each in the year.'

Mr. Rankine concludes with giving his experience on his own farm, the soil of which is of an inferior nature, and on which his cows produced about 1100 pints (550 gallons,) and the receipts from which amounted to only 7*l.* 13*s.*6*d.* per cow.

We have entered at considerable length into this, because it is of some importance to ascertain the real value and produce of this celebrated Scottish breed of cattle, and also to correct an error in an agricultural work, deservedly a standard one in Scotland, and which may otherwise be implicitly relied on.

We have spoken of the improvement which a cross with the Ayrshire has effected in some of the Welsh cattle; but the Ayrshire cattle are not yet sufficiently kown, and cannot be procured cheap enough, or in adequate numbers, to undergo a fair trial in the south. Some of them have been tried in the London dairies. As mere milkers, they could not compete with the long-established metropolitan dairy cow, the short-horn. They yielded as much milk, in proportion to their size and their food, but not in proportion to the room they occupied, and the increased trouble which they gave from being more numerous in order to supply the requisite quantity of milk. They produced an unusual quantity of rich cream; but there was so much difficulty in procuring them, so as to keep up the stock, and the price asked for them was often so great, that they were comparatively abandoned.

The fattening properties of the Ayrshire cattle we believe to be a little exaggerated. They will feed kindly and profitably, and their meat will be good. They will fatten on farms and in districts where others could not be made to thrive at all, except partly or principally supported by artificial food. They unite, perhaps, to a greater degree than any other breed the supposed incompatible properties of yielding a great deal of milk and beef. It is, however, as Mr. Rankine well observes, on the inferior soil and the moist climate of Ayrshire and the west of Scotland, that their superiority as milkers is most remarkable. On their natural food of poor quality they give milk abundantly and long, and often until within a few days of calving; but when they are moved to richer pasture, their constitution changes, and they convert their food more into beef. In their own country, a cow of a fleshy make, and which seldom proves a good milker, may be easily raised to 40 or 50 stones, and bullocks of three years old are brought to weigh from 50 to 60 stones. There is a lurking tendency to fatten about them which good pasture will bring to light, so that when the Ayrshire cow is sent to England she loses her superiority as a milker, and begins to accumulate flesh. On this account it is that the English dealers who purchase the Ayrshire cows generally select the coarsest animals they can find, in order to avoid the consequence of the change of climate and food. It is useless to exaggerate the qualities of any cattle, and it cannot be denied that even in this tendency to fatten when their milk begins to fail, or which often causes it to fail, the Ayrshire must yield to their forefathers the Highlanders, and also to their neighbors the Galloways, when put on a poor soil; and they will be left considerably behind their short-horn sires when transplanted to luxuriant pasture. It will be long, perhaps, before they will be favorites with the butchers, for the fifth quarter will not usually weigh well in them. Their fat is mingled with the flesh rather than separated in the form of tallow; yet this would give a more beautiful appearance to the meat, and should enhance its price to the consumer.

Two circumstances, however, may partially account for their not being thought to succeed so well when grazed: they are not able to travel so far on the same keeping as the Highland cattle can do; and, from their great value as milkers, they are kept until they are too old to fatten to advantage, or for their beef to become of the best quality.

Mr. Aiton gives an account of the treatment of the Ayrshire cow in large farms generally when he describes the management of that of his friend Mr. Ralston of Kirkum, in the county of Wigton.

'He keeps sixty milch cows at Kirkum, and nearly the same number at a few miles distant: besides, he rears on one or two other farms thirty or forty young cows to keep up the stock and for sale. His cows are of the Ayrshire breed in its greatest perfection, and so well managed, that every milch cow on his farm yields him her own weight of the best cheese to be met with in Scotland, and for which he draws the value of the cow annually.

'Mr. Ralston keeps his cows constantly in the byre till the grass has risen so as to afford them a full bite. Many put them out every good day through the winter and spring, but they poach the ground with their feet, and nip up the young grass as it begins to spring, which, as they have not a full meal, injures the cattle. Whenever the weather becomes dry and hot, he feeds his cows on cut grass in the byre from six o'clock in the morning to six at night, and turns them out to pasture the other twelve hours. When rain comes, the house-feeding is discontinued. Whenever the pasture-grass begins to fail in harvest, the cows receive a supply of the second growth of clover, and afterwards of turnips strewed over the pasture ground. When the weather becomes stormy in the months of October and November, the cows are kept in the byre during the night, and, in a short time after, during both night and day; they are then fed on oat-straw and turnips, and continue to yield a considerable quantity of milk for some time. Part of the turnip crop is eaten up in the end of harvest and beginning of winter to protract the milk, and part of them are stored up for green food during the winter. After they are exhausted the *Swedish* turnip and potatoes are used along with dry fodder till the grass can support the cows. Chaff, oats, and potatoes are boiled for the cows after calving, and they are generally fed on rye-grass during the latter part of the spring.' (Survey, p. 439.)

Mr. Rankine, in his account of his own farm of poorer ground, and deficient in winter food, (Farmer's Series, No. 12, p. 45,) enters more into particulars. 'In the end of autumn, when the nights become cold, they are kept in the house, after sunset, and get a little fodder; and from the middle of November until the pasture is again ready for them, they are fed entirely in the house, and let out only in fine weather to get water. They are regularly curried and kept as clean as possible. As there is not a sufficient quantity of green crop to supply them with succulent food, the milk is put off them as quickly after they are taken from the grass as it can with safety. Those that are to calve late in spring, and that are continuing to give a considerable quantity of milk, get a little extra feeding; the rest have straw alone. When the calving time approaches, they get chaff or cut-hay, boiled in a good deal of water, and enriched with a few potatoes or a little pea-meal, with hay to eat, in this way they go to the grass, which happens in general about the middle of May, in as good condition as when they left it. No food is found to produce so much effect as pea-meal, and will be profitably bestowed at the ordinary price of the grain, and though given in very moderate quantity.* Till the beginning of June they are seldom allowed to lie in the field during the night; but though they are protected as much as possible from the cold, their houses are at all seasons kept well aired and cool.

The advantage of feeding well in winter, and sending a cow to grass in good condition, is now generally understood; but the defect in practice is, that what can be afforded to the cows in this way is given only while they are in milk or when they calve. The return is, indeed, rendered more immediate, but it would be still more advantageous if a fair portion of the proper winter's food were given to the dairy cows after they were dry of milk.

Among smaller and poorer farmers, however, the Ayrshire cow undergoes more hardships than she should be exposed to. It is in the winter food that these people are most deficient, and the cows frequently have nothing besides oat-straw and hog-hay, or a very small quantity of turnips in the winter, and potatoes in the spring; so, that, when they are turned out to grass in May, they are very poor, and it is long before they give their proper quantity of milk, or the milk is good for any thing. It is well for them if there are any turnips left at winter, for in many cases these are all given in the autumn in order to preserve the milk a little longer. If the oat crop should fail, the cows of the small farmer fare hardly indeed. Mr. Aiton says that in 'in 1800 more than a third part of the cows and horses were killed for want of fodder. Nothing could be done but to kill part of the stock that the rest might be saved.'

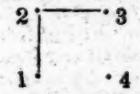
Mr. Aiton ('Dairy Husbandry,' p. 31) gives a satisfactory account of the rearing of dairy stock. They are selected from parents of the best quality, and a few are brought up that are not of the fashioned color. Those are preferred that are dropped about the end of March or the beginning of April, as they are ready for the early grass, and attain some size before winter.

*Take a bushel of chaff, and eight or ten sound Swedish turnips, having the tops and tails carefully taken off: add a sufficient quantity of water, and boil them together four or five hours. Add as much water as will allow the hand to move easily through the mass. Squeeze down the turnips, and add three pounds of pea-meal. Give this to a cow in the morning, and the same in the evening, and as much sweet hay as she will eat up clean, five times a day; then, without much expense, her butter will be as rich, and of as fine a flavor as can be produced in winter. Should the peculiar flavor of the turnip be detected, which is not likely, a small quantity of saltpetre put to the cream will take it off.

A Useful Hint.

For the American Farmer.

Mr. Editor—I am persuaded that many farmers feel fully convinbed of the *truth* of many valuable reports which come from the experienced and scientific agriculturist, but which are often of very little benefit from the difficulty of making experiments upon their own farm. I beg leave to suggest a very simple plan that will bring what may be dubious to a matter of fact, with very little trouble and at a trifling expense. Take 23 yards of common twine, tie a stake of about 16 in. long, (sharpened at one end to enter the ground) in the middle of the twine—then place two other stakes, each at 11 yards from the centre one—now place the 3 stakes in the ground, as represented below:



Mark the outside of the two lines with a spade or hoe, then take up No. 2 and place it at No. 4, and mark the two lines as before, and you have 11 yards square (121 sq. yds.) the 40th part of an acre—This mode will test an experiment as well as 11 acres—8 bushels of manure applied, will be at the rate of 320 bushels per acre, 10 bushels at 400 bushels per acre, &c. Such patches, on repeated trials, will afford evident proof of the *utility* and *proper quantity* required to an acre of lime, marl, plaster, bone dust, &c. as manures for different plants; and by arranging the plants at different distances, you will find the best mode of *planting* or *sowing*.

A Subscriber.

Clear Pork. Mr. Holmes:—I have been heretofore at some loss to determine what portion by weight of a swine tolerably well fatted, so that he will weigh at 18 months old, say 300, could be considered clear pork, and is usually salted as such—In conversation with an experienced farmer and pork raiser, recently, and one who uses figures, so as to know a thing or two without guessing, he informed me that he had slaughtered eight swine, well fatted, each weighing about 300 pounds in what is called a round hog dressed. After removing their heads, feet, spare ribs, bacon legs, lean meat, and a small stripe from the belly part to work in for the sausages, he had left only 100 pounds out of the 300.—This he has no doubt is about an average. If so, may it not be well for all who use or deal in this arlicle to know it.—*Maine Farmer.* I.

The Sugar Beet.

To the Editor of the American Farmer:

To find that the Editor of the "American Farmer," the head of the agricultural press of the United States, has considered the article in the Farmers' Cabinet, "on the manufacture of Sugar from the Beet," worthy his notice, is gratifying. That account was written in perfect candor and good faith; and how it should have called forth the unholy indignation of any one, especially one who professes to have been a cow-keeper since the year 1814, is truly unaccountable.

The subject of that paper naturally divides itself under two distinct heads—first, the cultivation of the Silesian Beet, for the manufacture of sugar; and second, as food for the dairy during the winter: it was its purpose—anxiously expressed—to keep them distingtly separate, and it, therefore, repeatedly urges, that agriculturists generally, will not attempt the manufacture of sugar, but leave that to those, whose situations in life render it a desirable mode of employing capital, and a taste for science and the arts.

The very handsome manner, in which the Editor has noticed that paper, demands from the writer, some ground, as guaranty for the confidence which has been so kindly manifested—will he therefore permit him to say, for seven years he had the superintendance of the chemical works of Samuel Parker & Co. (S. Parker, the author of the "Chemical Catechism") in Haggerton, London, where evaporation and crystallization were of every day occurrence; and during the whole of that time, has enjoyed the personal friendship of that Mr. Taylor, who was the *inventor* of evaporation by high pressure steam, the operation of which, he first witnessed at his chemical works at Bow, in the manufacture of crystallised citric acid: for this grand discovery Mr. Taylor obtained a patent in 1816, and this is the basis of all the improvements that have since been made, in the art of *making and refining sugar.*

In 1836, he was sent to France by the "Beet Sugar Society of Philadelphia," to enquire into the state of the Beet Sugar manufacture, and to learn the art; and he may well be proud of the testimony, which they bear to the faithfulness with which he fulfilled that mission, in the preface of the Report, published by them on that occasion; when also, he was appointed to conduct an experiment, on the French process of manufacture, at the sugar refinery of Joseph S. Lovering, Esq. (a member of the Society) by means of apparatus, similar to that in use in France, and constructed by himself, and which was performed to Mr. L's satisfaction, as he declared in a Report to the Directors of the Beet Sugar Society, stating that "the produce was correspondent to the account contained in the Report, and the sugar superior to any he had seen of French manufacture." Since this time, the writer has had the charge of the Laboratory at Mr. Lovering's establishment, the largest sugar refinery in the United States; where every day's experience adds to the conviction, that sugar from the beet can be made with the greatest facility, and to profit, by means of well appointed machinery, and the necessary knowledge and experience of the art. The time is gone by, for *if* and *but*—it is now only necessary to *do*, and whenever the business is taken up by persons possessing the necessary capital and science, it must succeed—but not till then.

On the second head, it is not necessary to say much—*the testimony of the country* is in favor of sugar beet, as food for the dairy, during winter, and the enormous crops of the present year, are truly astonishing proofs of the value of the cultivation—proofs that must bear down all opposition. On the question concerning the *comparative* value of this crop, and the Ruta Baga, it is only necessary to observe, the Sugar Beet, so far from communicating any unpleasant flavor to the butter, it is decidedly the means of making it, even in the winter, equal in quality to the best summer butter; and on the question of the *comparative* expense of cultivating the root, it is necessary first to clean the land thoroughly, before commencing the trial; our friends, therefore, who have cultivated the multicaulis, have now a fair opportunity of setting this question to rest—and if they will bestow upon this crop, the favor which they have lavished on the *Morus*, I have no fear for the result, and will promise that the Sugar Beet will not disappoint their expectations, and prove *ashes in the mouth*. I beg to hand you a letter which I have received from Mr. Homer Eachus, a man whose veracity, intelligence and correct mode of conducting all his affairs, will secure for him, from all who have the pleasure of his acquaintance, implicit confidence. Accompanying this, is a sample of beet sugar, made from beet roots grown in Jersey, and also, a small parcel of refined beet sugar, from France, which I beg you to accept.

Respectfully, James Pedder.

Philadelphia, 23d Dec. 1839.

P. S. I trust it will never be forgotten, that, for the introduction of the Sugar Beet into this country, the public are indebted to the "Beet Sugar Society of Philadelphia."

Copy of a letter from Mr. H. Eachus.

Edgmont, Nov. 28th, 1839.

Respected Friend—I have put away a good lot of the Sugar Beet, and am fairly convinced, from the quantity of ground under cultivation, that there has not been any thing of modern times introduced into our country, that will be of greater advantage to farmers, than the Sugar Beet. The great quantity of solid matter, as food for cattle, that an acre of good ground will certainly produce, makes it an object for every farmer to cultivate so much, if no more. I give thee the produce of one end of my lot, which I measured, and my sons weighed—it is as follows:—length of the piece laid off, 75 ft. and 28 feet broad, measured with a ten feet pole, and marked with accuracy: the weight was, four thousand two hundred pounds, which thou wilt find by calculation, to be about *forty tons per acre;* which, to my mind, proves my first assertion. My whole stock is about 900 bushels, or 50,000 lbs. At my next coming to the city, I will, according to my promise, bring some of the beets for thy inspection.

Another consideration of consequence is, the tops of the beets at their being gathered. The tops of my beets lasted my cows about three weeks, feeding them well once a day. The first week of our feeding them, increased the quantity of butter nine pounds, and continued the same quantity for the two succeeding weeks, which, at the decline of the season, is a great consideration, when we take into account, that a stock of 25 cows, decline in the fall of the year, at from 8 to 10 lbs. per week.

Before they had the tops of the Beets, they were down to 55 pounds at the last churning; the week following, when they had the tops, they were up to 64 pounds, and the butter was of a superior quality, both for color and flavor. The week after they got no tops, their produce was 51 lbs.; and the week following, it was 41 lbs.; and this week it is 28 lbs.—so that thou wilt see by this, counting back the weeks, that beets were taken out of the ground, and the tops fed, the two last weeks of October, and the first week in November.

I am, thy friend, Homer Eachus.

To James Pedder.

P. S. This is at thy service for publication, as it is strictly correct.

[Our attention has been drawn to the following supplement to the essay by Mr. Pedder, to which allusion is made in his communication above.]

Sir—Permit me to say, by way of postscript to the article on the manufacture of sugar from the beet, that the process by dessication does not injure, as it is very generally believed to do, the pulp for feeding cattle, sheep, &c. The improved mode of maceration now in practice, leaves it as valuable for the purpose of feeding stock, as that which is produced by crushing with the rasp and pressing; after which it only requires to be moulded into form, by the power of a common press.

It is generally admitted that sugar of a better quality, and more in quantity, can be obtained by dessication, than by rasping and pressing; but the tardy mode which has been adopted for drying the root, has hitherto operated as an interdiction to the introduction of the process upon a large scale; means of effecting this might, however, easily be devised.

I beg you to accept a free but *faithful* translation of a paper on this subject, which I have received from France. I find by late accounts from that country, that the modes of manufacture now in operation, are enabling the manufacturers to send into the market a very superior sugar, and at a profit which enables them to cope with that produced from the cane, as well as to pay the vexatious and impolitic impost of the government, which, in its poverty, it has been compelled to levy, as a means of raising supplies.

Translation of a Circular addressed to the manufacturers of Indigenous Sugar, by Mons. Laurance, Grace par Mills, (Charente Inferieuse.)

"Sir—I have the honor to address you on the subject of a new process, for the production of sugar from the beet, which I have been fortunate to bring to perfection in this, the conclusion of my crushing season. It is based upon my plan of late years, but being ignorant of chemistry, it has employed me many hours before I could bring it to that perfection which I have the confidence to believe will, in the end, cause it to be adopted by all fabricators of indigenous sugar. It is an extraordinary fact, which has put to fault all science, that from 1000 pounds of pulp, the juice of which is 5° by saccharometer, I obtain 992 lbs. of juice at 5°, and 444 lbs. at 2. 50°, and I offer to prove this, mathematically, publicly or privately.

"Consider, sir, the great advantages which must arise from this discovery. In this process no more bags, no more clais, no more powerful hydraulic presses are requisite, and the whole apparatus for the manufacture of 400 hectolitres in 24 hours, will amount to a very small sum—no fear of fermentation, even after 24 hours extraction of the juice—the bad roots can be used as well as the good*; the work, simple, and more easily performed, than by the usual method: the defecation, concentration and finishing being performed over naked fires with the greatest facility; the pulp, equally fit for cattle, after being pressed properly together. I will warrant that the yield shall be greater than what has hitherto been obtained by any other process. You will perceive that I obtain more than 100 per cent. of juice of undiminished weight, and this must give a great and profitable result; but you will understand why I do not give the result in figures, as so much must depend upon the *quality of the beets*—I only warrant that every manufacturer shall be satisfied with the results, in that he will be able to obtain a very fine *third* quality of sugar."

The process above mentioned is conducted by dessication and maceration; but when Mons. Laurance proposes that the concentration and finishing should be carried on over naked fires, he displays an ignorance of the value of steam for this purpose, which, in such a person, is scarcely excusable.

Phila. 19th Nov. 1839. James Pedder.

* This is *unnecessarily good.*

Treatment of Broken Limbs of Horses.

To the Editor of the Franklin Farmer:

Dear Sir—Being a great lover of stock, and deriving more pleasure by contributing to that part of animated nature that cannot make its wants known to man, than from any other source, and learning through your paper that Medoc has met with a misfortune that may prove fatal, I have thought fit to give you the result of my experience in a parallel case that occurred to a Jack last spring. I feel much hesitation in doing this, being well apprized that Medoc is in the neighborhood of as good surgical aid, as can be procured in the west; but as cures are frequently the *result* of accident as well as the *effect* of mature thought and experience, a tyro in the profession, may be pardoned for suggesting his opinions, *even* to the sage—but to my case. The left fore arm was fractured transversely, about five inches above the knee joint, the *bone betwixt this fracture* and *the knee*, *was split down to the joint*, so that, in reality there were two fractures, communicating with each other. The first thing done, was to suspend him, for the reason that it had been the practice heretofore; but close attention soon satisfied me that my animal was very uncomfortable and restless. Although I knew the fractured parts could be kept better fitted to each other, by keeping him suspended, than they could be, if he were permitted to touch the ground; I determined to make the experiment for the following reasons: The pressure upon his lungs affected his breathing very much, and upon his bowels produced great costiveness. However, after turning him loose, I soon found the limb swinging about, whenever he moved, and quite crooked when he touched the ground. It immediately occurred to me, that something more than ordinary bandages must be applied. I made a bandage of strong cotton domestic, about two inches wide, long enough to reach from the ancle to the body, and back to the ancle joint—spread it from end to end with thick tar—applied it carefully, so that every time it would lap half the width upon the previous turn of the bandage: I then had some cotton nicely carded and laid betwixt two pieces of the same domestic, wide enough to rap round the limb, extending from the knee joint to the elbow, so as to encompass the whole of the fractured limb—quilted carefully—running the rows of stiches about an inch from each other, for the purpose of keeping the cotton permanent; this was also to spread with tar and laid over the first bandage. I then made some white oak splints, about an inch wide, long enough to extend from the knee to the elbow, quilted them betwixt two layers of domestic, wide enough to go round the whole of the previous dressing; this was likewise spread with tar and laid on, and the whole secured with strong tape, sewed to the domestic. This dressing was continued for eight weeks, without being touched except to tighten the tapes as the swelling receded, and my patient recovered with very little deformity. After the whole is applied, be *certain* to examine and see that the cushion betwixt the first bandage and the splits, is wide enough to prevent the ends of the splints from coming in contact with the limb—otherwise they will irritate the skin and keep him restless. In Medoc's case the dressing should extend only from the knee to the ankle. If you think the above suggestions could be of any service to this splendid horse, or to any other unfortunate quadruped, you may give them a place in your valuable paper; if not, lay them by with other such stuff, that I have no doubt you are frequently plagued with.

The Ice-boat Relief has been put in first rate order for keeping open the harbor of Baltimore during the winter—and the new ice-boat Patapsco will soon be ready to aid her. An instance is given by the 'American' of the value of the ice-boat system to the agriculturist as well as the merchant—last week 600 hds. tobacco were received, little or none of which would have been brought at this late period of the year, but for the conviction in the minds of the captains of the bay vessels, that if there had been ice in the river or harbor, the ice-boat would have prevented delay or risk both in entering and departing.

The President of the New Orleans Chamber of Commerce, in answer to the letter of the President of the Macon Convention, remarks in declining to serve on the committee:—

"I am of opinion that the value of cotton, like that of any other commodity, is regulated by immutable laws, which no combination or monopolies can materially or permanently affect. That attempts to increase, diminish or regulate its value by such combinations or monopolies, either in England or America, must in the event prove disastrous to the parties concerned in such attempts, without being beneficial to any other interests whatever. I am also of opinion that our banking institutions cannot legitimately enter into the business proposed, and that if they were to do it, it would lead to the most injurious results to the currency of the country, and thereby tend to derange and unsettle the value of every species of property.

These are, in a few words, my principal reasons for declining to act as one of the committee of your convention; and I trust, sir, my frank avowal of them will not be deemed obtrusive. Presiding over the chamber of commerce of this city, and over one of the banks of this state, I cannot tacitly acquiesce in my name being connected with the proposed measures, which, although doubtless projected with the most patriotic motives, would, in my humble opinion, if carried into effect, be seriously injurious to the agricultural, commercial and banking interests of the country."

COMMERCE OE THE UNION.

In a note appended to the late Report of the Secretary of the Treasury we find some interesting statements, presenting general results concerning the past imports and exports of the United States, drawn from the official tables in the Department. These results are expressed in round numbers, without aiming at fractional accuracy.

It is stated, and we presume the statement will cause some surprise, that the whole imports of the country have not more than doubled since the first four years of the Government, while the exports of domestic produce have quite quadrupled. The consumption of foreign merchandise in the United States during the same period has increased not much over a hundred per cent, while our population has increased fully four hundred per cent.

In regard to some of our chief articles of export, the great Southern staple, cotton, has been augmented in value from a few thousand dollars to sixty or seventy millions. Tobacco has remained nearly stationary, ranging in value from six to seven millions; flour about four millions: lumber, from two to three millions; rice, from one to three millions; pork at a million and a half; and furs at about three quarters of a million. The exports of domestic manufactures were estimated to be worth in 1793, one million; in 1838 they were reckoned at eight millions. In the State of Massachusetts the manufactures of leather alone, which is mentioned as an example to show how great has been the tendency towards an increase of manufacturing industry in the country, have reached in value an amount exceeding that of any other of the great articles of production in the State, and nearly equal to one fourth of the immense exports of raw cotton from the whole Union.

The imports of cotton fabrics into the country amounted in 1836 to seventeen millions; during the last three years, the average has been about eleven millions. The Silks imported were estimated in 1822 at a sum ranging from four to six millions yearly. In 1836 the imports of these goods increased to twenty two millions; during the last three years they have been on an average equal in value to twelve millions and a half annually.

The imports of specie have been enlarged from three and five millions to about twelve millions yearly; and those of coffee from four and five millions to eight millions, tho' considerable portion of these are, as formerly, re-exported. The imports of woollens for the last twenty years continued at about seven millions annually; in 1836 they rose to twelve millions.

It is stated, as a matter worthy of special notice, that with a population augmented, since 1821, quite seventy five per cent, the great imports of cotton and woollen goods have augmented but little. Those of silk have increased three or four fold in amount.

Some remarkable alternations are noticed in the trade of particular cities and States in the Union. The city of New Orleans in 1811 exported articles to the amount of only two millions; in 1838 the exports from that city exceeded in value *thirty three* millions. In the first quarter of 1839 they were more than eighteen millions. The commerce of New York shows greater variations in the amount of imports than in that of exports. The latter in 1791 were two and a half millions; in 1811, twelve millions, or six times those of New Orleans for the same year. During the last three years they have averaged annually twenty six millions, falling short of the exports of New Orleans, seven millions. Mobile, the seaport of a State which was not organized till thirty years after the Government had gone into operation, is now the fourth in the Union in the value of exports, shipping nearly one-half as much domestic produce as New York, and more than the whole State of Massachusetts. The State of South Carolina stands third in the amount of domestic commodities exported—the States of Louisiana and New York being first.

With regard to imports, New Orleans has increased nearly four-fold in the last twenty years, and presents an aggregate of fourteen or fifteen millions annually: yet she is only the third, in this respect, in the Union. The imports into New York constitute nearly three-fifths of the whole importations into the United States. In 1802 they were a little more than one fourth of the whole; in 1821, they had enlarged to twenty three millions; in 1836 they reached the aggregate of *one hundred and eighteen* millions of dollars. In the reduced business of 1838, they were nearly eighty-nine millions. Among the older cities of the Union the imports of Boston alone, leaving out New York, have indicated a continuance proportionate to what they were in 1802.

Among the foreign nations with which our commerce has been most extensive, in the way of exports, England held the chief place during our Colonial state; but in consequence of the Revolution and other causes, it increased to France during the first ten years of the Government, to about 20 millions annually, nearly double the amount of our export trade with Englhnd. Since that period our exports to England have risen to about sixty millions, annually, without much change in our trade with France. To Spain our exports are next in value, having increased from four millions to eight without including any part of Spanish America.

In the foregoing statement wherever the average of the last year is spoken of, the estimates should be taken in connection with the embarrassed condition of the country during that period. Imports fell off very considerably, while exports of cotton increased largely. Thus, the importations into New York alone in 1836 amounted in the aggregate to one hundred and eighteen millions—much more than for any year since. So, on the other hand, New Orleans exported in 1838, when the country was labouring to pay foreign debts, commodities worth thirty three millions, and other Southern cities in similar proportion.—*Amer.*

EXTENT AND EFFECT OF AGRICULTURAL IMPROVEMENTS IN SCOTLAND. Since the conclusion of the American war, in 1782, improvement has proceeded with singular rapidity in every district; and while the rental rolls of proprietors have been doubled, tripled and quadrupled, the condition of the tenantry, and of the lower ranks, has been ameliorated almost in a proportional degree. These circumstances are sure tokens of agricultural prosperity, and demonstrate in the most favorable terms, that husbandry is a main pillar of the state; and that the happiness and welfare of the community depend greatly upon the manner in which the art is executed. No nation, whose husbandry is feeble and imperfect, can be regarded as really prosperous, however considerable may have been the advances they have made in other arts, because, when the art of raising food is neglected, all others must ultimately be forsaken. In short, to promote and encourage husbandry, to remove every obstacle that stands in the way of exercising it, and to secure those concerned in carrying on the art, are duties obligatory upon the government of every country; and according as these duties are discharged, so will the wisdom of such a government be estimated, by every man who feels for the prosperity of the state, or is attentive to the sources from which that prosperity proceeds.—*Brewster.*

AGRICULTURAL SURVEYS. The numerous agricultural surveys, executed under the authority of the [British] Board [of Agriculture,] were of singular advantage, because they brought to light the practices of every country; and, while they pointed out the obstacles which lay in the way of improvement, they stated the most effectual methods of removing them. The very collision of argument, which such discussions occasioned, incited agriculturists to investigate the principles of the art which they professed, and induced them to search after new channels of improvement.—*Ibid.*

ORIGIN OF THE WORD "FARM."—In the Saxons time the estate which the Lords of Manors granted to the freemen were at the first but for years, with a tender of a rent, which in those days were of corn or victuals, and thence the leases so made were called formes or farms, which word signifieth victuals; but times ensuing turned the victuals into money, and terms of years to terms of life and inheritance, retaining the rents and those called quitrents, or the rents of those persons that were acquitted or free.

RUTA BAGA FOR HORSES. The writer has tried a successful experiment of feeding a horse on ruta bagas, in addition to the usual feeding of hay and oats. At first he could only be induced to eat them after he had gone for some hours without food, but he now has a strong appetite for them, and will eat them freely without cutting, gnawing them down with his teeth. Half a dozen good sized ones in a day, with two quarts of oats, keep him in excellent condition except when he is worked unusually, when a greater supply of oats is necessary.—*Gennesee Farmer.* J. J. T.

ON PREPARING ICE AND FILLING AN ICE-HOUSE, *So as the Ice may keep for two or three years. By* MR. JAMES YOUNG, *gardener to Henry Smith, Esq. of Wilford-house, Nottinghamshire.*

SIR,—None of your correspondents having laid before us the proper method of preserving ice, so as to keep in an exposed situation through the hot months of summer, for one, two, or more years, as may be required, I now venture to do so. Most gardeners who are in the habit of laying up ice annually for summer use, complain of its melting away too rapidly. This, I presume, is owing to the method they practice to preserve it. To remedy this evil, the method which I have practised for a considerable number of years with gratifying success, is as follows:

In the month of December or January, when the water-pools are frozen to a sufficient thickness, say one or two inches, proceed to break the ice in pieces, and draw it off the water with iron hooks, conveying it to the ice-house in carts, as quick as possible. Before throwing it into the house, three or four men should be employed to break it in small pieces, about the size of a common road metal. Then carry it into the house, where two men should be again employed in pounding it almost to powder. Lay the bottom and the sides of the house with a layer of wheat straw three or four inches thick. After there are about two feet of ice thus pounded, take ten pounds of salt, and dissolve it in ten gallons of boiling water. When the salt is sufficiently dissolved, pour it on the ice through a common garden water-pot; thus going on regularly every two feet, watering and laying the sides with straw till the house is filled, finishing with a double quantity of salt water. After it has been in eight days, and when it has subsided, fill up closely with small bundles of straw, to exclude all air as far as possible.

An ice house filled in this manner will be found, when opened in summer, to be as firm as a rock, and to require at all times the force of a pick-axe to break it up. It will be found to keep three times longer than the common method of filling ice-houses, and is most suitable for being received from the ice-house for use, as it will keep three times longer when exposed to the air. I was induced to try the above method, on account of our ice-house being placed in a very exposed situation. The sun shines from rising to setting on it, and it was found impossible, before adopting this plan, to keep ice above a year, and now it keeps three years, and the last of it is as good as the first.

I remain, sir, &c., JAMES YOUNG.

Wilford-house, Sept. 5, 1839.

ELECTRICITY IN TIC DOLOUREUX.—M. Magendie has obtained the happiest results from the application of electricity in affections of the senses, particularly in that acute disease termed tic dôloureux. He causes the electric current to pass over the nerves by means of needles of platina, placed at greater or less intervals. In some instances a single application is said to have been sufficient; and, in one case of dreadful suffering, in which the patient had been forced, from the pain of speaking to express his desire by writing, six applications to the nerve entirely removed a malady of three years' duration.

INQUIRY—MANAGEMENT OF SANDY SOIL.

"*Editor of the Gennesee Farmer*,—Sir:—My farm is a light sand, very easy to work, producing good crops from the use of plaster and clover, but not showing the effects of manure as much, or as long, as I have supposed land to which it was applied, should. Is there any mode of treatment by which this defect can be remedied, and what is the proper course to pursue. A. D."

The loss of the manure, in the case alluded to by our correspondent, proceeds from infiltration, or sinking in the porous subsoil; and to prevent such a result, more body or tenacity must be given to the soil. Large bodies of land of this description within twenty miles of Albany, have been changed from what was formerly considered worthless pine plains, into fertile fields. Usually in the vicinity of such sandy lands, swamps filled with clay or alluvion can be found, and this material drawn upon and incorporated with such light soils, gives them a consistency and power of retaining moisture, and consequently manures, that they could not have without it. If the clay contains some lime, or in other words, is marl, it will be so much the better, as sandy or very light soils do not usually abound in lime. Leached ashes, where they can be obtained, have proved of great service in improving sandy soils, and are very extensively used on Long Island for that purpose, in connection with dressings of seaweeds. Dr. Jackson remarks, page 165 of the Geological Survey of Maine, that "spent ashes acts also by the quantity of lime it contains, and the principal advantage of using it in preference to lime alone in the treatment of sandy soils, depends upon the clayey nature of the ashes itself, which serves to improve the texture of the soil, and retains the manures and water longer than it otherwise would." Giving more firmness to the soil by the mixture of clays or marls, leached ashes, or other substances calculated to give more tenacity and promote the power of absorbing and retaining water; and a free use of clover and plaster, would be the course that has been successful on many soils like that of our correspondent, and would doubtless succeed on his.

NITRATE AS A MANURE.—*Sir*,—In answer to your correspondent, Mr. J. R. Barker, who inquires as to the use of nitrate of potash (saltpetre,) I beg to say, it should be used as a top dressing in March or April; and might then be put in those parts where there is an evident failing in the crop, but the growth must not depend on saltpetre alone; as a cheaper substitute, the nitrate of soda has strong recommendations. At the present time many spots on the Guildford Downs shew evidence of its beneficial effects; but always, where there has been also a portion of stable dung, or folding with sheep, for the alkali is not only a food of itself to growing vegetables, but it acts as an assistant in converting the œleaginous matter that may be in the land into soap; by that means they are soluble in water, and become food to growing vegetables; alone, it is recommended as a top dressing in the spring, being exceedingly soluble, soon passes down to the roots, therefore is best sown in wet weather; the sun has a tendency to injure the leaves of plants when the sowing takes place in its rays. This nitrate has been mixed with the prepared humus manure, and sown with the seed in the proportion of one pound of nitrate to a bushel of manure; the effects have been good with every seed—and this coincides with the experiments made by Mr. Robert Rigg, as published in the Farmer's Magazine for June last, of the influence of nitrogen in the growth of vegetable substances. Of the price of this concentrated nitrogen in the shape of cubic soda, it is about 10*l.* per ton cheaper than the nitrate of potash.

Barossa Cottage, Bagshot, Aug. 3. E. J. LANCE.
Farmer's Magazine.

MANAGEMENT OF BEES.

The following is an extract from a letter, written by a gentleman in Tennessee, to the editor of the Cultivator; which seems to contain much valuable information, on the manner of preventing the ravages of the *Bee Moth*.

"When I commenced keeping house, I purchased a few stands of bees, and the moth destroyed them all the first year. Upon examination, I found that the moth deposited the eggs in a web between the bench and the box: and as soon as they hatched, they crawled up to the comb, and formed a web around them so the bees could not destroy them. I made it a rule to go to the stands two or three times a week, and brush off the eggs and web deposited; but finding this troublesome, I concluded to raise the boxes by putting small wedges under each corner: this I found of great service; but I discovered that, unless the wedges were made very smooth, the eggs were deposited under the wedges. I then concluded to drive a ten-penny nail under each corner of the hive, and let it rest upon them, so that the bees could pass under all round. Since I adopted this plan, which has been twelve years, I have not, as I recollect, been troubled with a single bee moth."

The "Farmer's Manual" states that bees can be wintered in the following manner, on half the honey that would be required, in the ordinary mode of procedure, and with less risk of their dying. "Small swarms of bees that have but little honey, may be preserved in a healthy condition by putting them into a dark dry cellar, when the severe cold weather commences in the fall, and letting them remain till warm weather comes in the spring. Some swarms of bees have wintered well in a cellar, when they have not had half honey enough to keep them, if they remained exposed as usual. Small swarms produce but little heat, and of course they suffer from cold when in a cold place.

If rats and mice are allowed to run at large in the cellar, the bees should be protected against them. Some men, in making bee-hives, do not properly consider the difference between the size of a bee and a mouse, and in making a door for the former, they give it sufficient size to admit the latter, and this intruder will take possession of the hive, whether it be in the cellar or on the stand, in spite of the hostile disposition of the occupants. But, whether the entrance be large enough to admit a mouse or not, it would be well enough to nail a piece of tin at the top, to prevent any depredators from entering into the hive; this should be done with caution, as a little jarring of the hive will be liable to break down the comb."

THE SILK CULTURE.

SILK GROWING IN 1839.

Experiment of Mr. Aaron Clapp, of Hartford, Conn.

The great importance of the silk culture to our country, and the eagerness of the public to obtain information respecting it, renders it the duty of every one engaged in producing a silk crop, to impart all the information he is capable of giving, that the public may have correct data on which to base their confidence to engage in, and to go forward in this great national enterprise. And when we take into consideration, that $23,000,000 are annually paid out from this to foreign countries for the article of silk goods of every description; and while we know that we might find a foreign market for double the amount of silk in the raw state, if we could produce it, we should naturally suppose that every citizen true to his country, and also who has a desire to lay up some property for himself (which is the character of Americans,) would not only impart, but seek all the information necessary to forward and influence others to engage in this enterprise.

With these views, and in compliance with the earnest solicitation of my fellow-citizens, I give publicly the result of my experience during the past summer.

I planted, the second week in May, a lot of morus multicaulus trees on one acre and a quarter of good land, being rich and loamy, by laying down the roots and trees without being cut, burying them about two inches deep; this I consider the best mode for planting multicaulis trees. The rows were three feet apart. I did not put any manure on the land, and the land being rather wet, and also it being a wet season, only about half as many trees as I had expected were produced; those trees that did come up grew and did very well.

I raised fifty bushels of excellent cocoons, and what I reeled produced one pound of silk to the bushel, which is pronounced by good judges to be better than the imported, and equally as good silk as any made from any other species of mulberry tree in our country. There was a larger quantity of foliage remaining on the lot than we had picked, and allowing that 100 lbs. of silk can be made from 1¼ acres of ground, and at $6 a pound, which is now the price of it, it would amount to $600. Now there is no other species of mulberry tree that will produce the quantity of foliage from the same piece of ground, and there is no crop of any thing that will produce such a profit, and in so short a space of time. Even a whole farm of 200 acres of land will not produce more than $600 annually, of ordinary crops.

Lancaster, Oct. 16.

Sir—In your Silk Farmer of the 12th inst. you ask us questions, which we take great pleasure in answering as briefly as possible; you may make what use you think proper of them.

Our cocoonery is 42 by 22 feet, two stories high, with a basement story; cost, with fixtures, $450. We did not feed as many worms as our cocoonery would accommodate, as we had not the eggs; we could accommodate one million in the course of the season.* We hatched 100,000. On the 24th of April the first lot commenced hatching. We had 376 lbs. of cocoons: average number of cocoons of the sulphur, 180 to the pound; but of the choice, 97 made a pound. We have no cocoons for sale. We fed the mammoth sulphur and mammoth white, some peanut, and some sulphur second crop. We used in the first part of the season white and Chinese seedlings, and in the latter part of the season Morus Multicaulis, which we consider much superior. Our worms were not fed after 10 o'clock, and we commenced feeding at 5 in the morning: during the day time they were fed as much as they would eat. We have a large supply of eggs of these worms, and some superior second crop sulphur, warranted. We sell our eggs at present at $10 per ounce, clear eggs. We cannot say what clear profit we have made from feeding worms, as we let so large a quantity of ours cut for eggs; but we are perfectly satisfied we can make three times as much out of an acre as at any other farming operation that we know of, without reference to trees or eggs. We expect to feed 700,000 worms next summer, provided we have a sufficient supply of leaves.—We have been decidedly successful in feeding, having lost but few worms from sickness, but more from spiders. At the commencement of the season the thermometer ranged from 50 to 85 degrees: we had no fire in our cocoonery. By some private opportunity we will send you a few cocoons, having none that the cocoons were not cut; we also send you two double, that the difference may be seen. We also send a small hank of reeled silk; we have just finished reeling our silk, and have 23 lbs. like the samples sent you. The sulphur cocoons, spoken of above, commenced hatching the 20th of June; they commenced spinning the 20th of July, and in three days, had all left the hurdles.—*Phila. Silk Farmer.* A. & C. HERR.

*By feeding a succession of broods.

HOUSEWIFE'S DEPARTMENT.

INTERCOURSE—BY MRS. L. H. SIGOURNEY—Most of the refined nations of our time entrust the usages of hospitality to the keeping of the gentler sex. Especially in this new Western world, those Lares and Penates of the Romans, are cordially entrusted to our care. Elevated as we are, by intellectual advantages, beyond all previous example, it might rationally be expected that a degree of lustre and dignity heretofore unknown would dignify social intercourse.—Still we see it very prominently identified with the pleasures of the table. To make the satisfaction of the palate the principal test of hospitality, seems to accord with a less refined state of society, or to argue some destitution of intellectual resource. Would our ladies set the example of less elaborate entertainments, or less exuberant feastings, more room would be left for the mental powers to expand, and the feelings to seek interchange in conversation. At least, they might save husbands' purses, their servants' tempers, and themselves a world of fatigue. Let them recollect that it is but a relic of barbarism which they cherish, when they allure their guests to indulgence of appetite perhaps to hurtful excess; for temptations of the palate, though they may be multiplied by the hospitable lady out of pure benevolence, cannot be yielded to with impunity by all whom her invitations thus expose. Her skill in culinary compounds may wound the health of those she best loves.

It would be but a sorry compliment for the dyspeptic husband to murmur forth, like him of Eden, this sad extenuation, 'The woman whom thou gavest to be with me, gave me, and I did eat:' or for the more indignant guest, when seeking his physician, to exclaim, 'The serpent beguiled me, and I did eat.'

It was formerly too much the custom to press, amongst the pledges of hospitality, the draught that inebriates. More light and a better creed, have modified this practice. But still it is not extinct. If it be asked why the christian inhabitants of a most Christain land should choose, as the interpreter of their hospitality, a usage more dangerous than the sword of Damocles, there is no better answer than, 'Because it is the fashion.' The cup will not, indeed, mark him who partakes with its immediate poison; but may it not foster what shall rankle in his veins with a fa-

tal contagion, threatening not only the body but the soul?

When philosophers have inquired, how women, whose happiness and safety are so deeply involved in the purity of those around, could thus dare to trouble the fountains of temperance and of virtue, the only reply has been, 'It is the fashion.' Holy men, the guardians of God's altar, have demanded why she hath been thus faithless to her trust.—And she has answered, 'It is the fashion.' But when the garniture is thus stripped from all earthly things, when that dread assembly is convened, where none will dare to plead the omnipotence of fashion when a voice from the throne of the Eternal questions of the plague spot upon the soul of the guest, the brother, the husband, or the child—what shall the response be?

Observations on making Puddings and Pancakes.—The outside of a boiled pudding often tastes disagreeable, which arises from the cloth not being nicely washed, and kept in a dry place. It should be dipped in boiling water, squeezed dry and floured when to be used.

If bread, it should be tied loose; if batter, tight over.

The water should boil quick when the pudding is put in; and it should be moved about a minute, lest the ingredients should not mix.

Batter pudding should be strained through a coarse sieve when all is mixed. In others the eggs separately.

The pans and basins must be always buttered.

A pan of cold water should be ready, and the pudding dipped in as soon as it comes out of the pot, and then it will not adhere to the cloth.

Very good pudding may be made without eggs, but they must have as little milk as will mix, and must boil three or four hours. A few spoonfuls of fresh small beer, or one of yeast will answer instead of eggs.

Almond Pudding.—Beat half a pound of sweet and a few bitter almonds with a spoonful of water; then mix four ounces of butter, four eggs, two spoonfuls of cream warm with butter, one of brandy, a little nutmeg, and sugar to taste. Butter some cups, half fill, and bake the pudding. Serve with butter, wine, and sugar.

Baked Almond Pudding.—Beat fine four ounces of almonds, four or five ditto, with a little wine, yolks of six eggs, peel of two lemons grated, six ounces of butter, near a quart of cream, and juice of one lemon. When well mixed, bake it half an hour, with paste round the dish.

Bread and Butter Pudding.—Slice bread, spread with butter, and lay it in a dish with currants between each layer; and sliced citron, orange, or lemon; if to be very nice, pour over an unboiled custard of milk, and two or three eggs, two hours at least, before it is to be baked.

Orange Pudding.—Grate the rind of an orange; put to it six ounces of fresh butter, six or eight ounces of lump-sugar pounded; beat them all in a mortar, and add as you do it, the whole of eight eggs well beaten and strained; scrape a raw apple, and mix with the rest; put a paste at the bottom and sides of the dish, and over the orange mixture put cross bars of paste. It will bake in half an hour.

An excellent Lemon Pudding.—Beat the yolks of four eggs; add four ounces of white sugar, the rind of a lemon being rubbed with some lumps of it to take the essence; then peel, and beat it in a mortar with the juice of a large lemon, and mix all with four or five ounces of butter warmed. Put a crust into a shallow dish, nick the edges, and put the above into it. When served, turn the pudding out of the dish.

Baked Apple Pudding.—Pare and quarter four large apples; boil them tender with the rind of a lemon, in so little water that, when done, none may remain; beat them quite fine in a mortar; add the crumb of a small roll, four ounces of butter, melted; the yolks of five and whites of three eggs, juice of half a lemon, and sugar to taste; beat all together, and lay it in a dish with paste.

Little Bread Pudding.—Steep the crumbs of bread in about a pint of warm milk; when soaked beat six eggs, whites and yolks, and mix with the bread, two ounces of butter warmed, sugar, orange-flower water, a spoonful of brandy, a little nutmeg, and a tea-cupful of cream. Beat all well, and bake in a tea-cup buttered. If currants are chosen, a quarter of a pound is sufficient; if not, they are good without, or you may put in orange or lemon candy. Serve with pudding sauce.

A Dutch Rice Pudding.—Soak four ounces of rice in warm water half an hour; drain the latter from it, and throw it into a stew-pan, with half a pint of milk, half a stick of cinnamon, and simmer till tender. When cold, add four eggs well beaten, two ounces of butter melted in a tea-cupful of cream; and put into it three ounces of sugar, a quarter of a nutmeg, and a good piece of lemon peel.

Put a light puff paste into the dish, and bake in a quick oven.

LATEST NEWS.

By the arrival at New York of the packet ship England, Capt. Waite, from Liverpool, London and Liverpool papers to the 7th of December are received.

We are happy to announce that the information of almost every kind, that immediately concerns this country, is highly gratifying, some most unexpectedly so. It had been expected for some time, that cotton would undergo a considerable reduction. We find, however, that the fall is yet very trifling.

Corn is lower, but American flour has advanced two shillings. Mr. Jaudon has issued a statement of the affairs of the United States Bank. It is, we believe, the same which we gave to our readers nearly two months since. One or two of the London papers assailed the statement with much rudeness, but the United States Bank stock rose to £16 10, an advance of ten shillings.

We see it stated that Mr. Jaudon has succeeded in effecting a loan of £900,000 with the Rothschilds. The latter, it is added, will be the agents of the U. S. Bank.

So far as we can gather, there is a much better feeling in London with reference to American stocks. We observe, however, that calculation is made upon the shipments of produce from this country to England, which, happily, we all know will be very large.

Though the merchants of London manifest great anxiety as to the policy of the British Government towards China, yet nothing has transpired to indicate its intentions.

The French have suffered considerably in the north of Africa by the sudden onset of an army of Arabs, and a good deal of anxiety is felt in Paris.

Parliament is to meet on the 16th of January.

Liverpool, Dec. 2, 1839.—For some days after the last packet sailed, 27th ult. we had rather more demand for cotton, and the market was more firm, but to-day the quantity offering has been much larger than before, and the market closed this evening heavily, at a decline of 1-8d per lb. This is attributed to the accounts received this morning by the G. Western. Fair qualities at 7a7¼d per lb. The money market continues in an unfavorable state.

The last sale of Turpentine was 900 bbls inferior quality at 11s 6d per cwt; fair new may be quoted 12s 6d per cwt. The Tobacco market appears steady, and the sales of the month were about 120 hhds.

December 7th.—Since the date of the above, our Cotton market has further declined fully 1-8d per lb; indeed the business of the following day was chiefly at this reduction. The demand has been rather better for the last day or two, but very freely supplied. The sales for the week ending last evening, amounting to 22,400 bales, all to consumers.

Flour in bond is rather higher, and may be quoted 30a31s per bbl.

The Maryland Legislature assembled at Annapolis on the 29th ult. Mr. Thomas of St. Mary's was re-elected President of the Senate, and Mr. Williams, of Harford, Speaker of the House. The Governor gives rather a gloomy picture of the finances of the State. He alludes to the suspension of the Banks, and makes the following remarks in codnexion therewith:

It is for the Legislature to determine whether these evils will admit of correction, and what legal provision will be most likely to accomplish that object. It appears to be the general opinion, that banks ought to be placed under additional regulations and restrictions; and that stockholders should be made responsible to creditors for all losses, and be deprived of their dividends during a suspension of specie payments. I shall first point out what appears to me objectionable in the plan of subjecting stockholders to these liabilities, and then suggest such regulations as may have a beneficial effect upon the banks. The real stockholders, that is, those who have paid for their stock, know nothing about the management of the banks, and have very little influence in choosing officers and directors.—Many of them are women and children, and all of them in losing their stock, suffer sufficiently, without being deprived of every thing else to satisfy depositors and note holders, who commit the same indiscretion of trusting the banks.

The State is a Stockholder, and has more power than individuals to prevent mismanagement; yet banks might fail before the cause were known to the public authorities. The stock is continually changing hands, and it would be difficult to trace the liability thro' a succession of stockholders, indeed it would be useless to make the search, for if such a provision were engrafted into bank charters, the owners of shares would be found in possession of no other property.—The same objections apply, with greater force, to the plan of depriving stockholders of their dividends.—They have no control over banks, and many of them, no other support; and it would be rather a rigorous proceeding, to take the bread out of their mouths because the Government itself allowed these institutions to violate their obligation. Under such a regulation the State would be deprived of her dividends, which could not be conveniently spared in the present condition of the treasury. The officers and directors instead of being punished or restrained by a provision of this kind, would be benefitted by its operation, in having a large amount of unpaid dividends for the accommodation of themselves and their friends.

It would be in vain to prohibit loans to directors, because the notes of other persons might be discounted for their use. To limit the circulation according to the amount of specie is an uncertain rule for many reasons; and especially for these: that the proportions are varying every hour, and that specie is as likely to be demanded for deposites, as for notes. If the loans and discounts of every bank in the State were fixed at a certain limit, beyond which they could never be carried without causing a forfeiture of its charter; its circulation might be kept under control; its overtrading be checked, and an excuse furnished for resisting the importunate demands of borrowers. If this limit were fixed by law, each bank would have some security against the excesses of the rest, and might be regulated in its own operations, according to its actual capital and to means. No bank ought be permitted to issue, pay, or receive any note for a less sum than five dollars, under any circumstances; or to refuse to redeem its obligations, till its specie was entirely exhausted.

It would then be seen which was standing on a solid foundation, whereas, at present, they are all placed upon the same footing and are covered by the same shield. They would be deprived of the power of drawing specie from other banks, while they were not paying it themselves; and relieved from the duty of deciding whether the public interest required them to suspend or resume.—But no regulations or restrictions will avail, unless some means be provided for enforcing them; and unless the Legislature reserve the power to repeal the charter of every bank that violated the conditions imposed. The banks ought to be required to give their assent to whatever legal provisions may be adopted; and those which refused would be left exposed to the penalties incurred, and be compelled to wind up their affairs, useless, indeed, their broken charters were found too strong for the power and authority of the State.

DOMESTIC MARKETS.

At Charleston, Dec. 28, a downward tendency was manifested in every description of Upland Cotton, and the intervention of the inclement weather which accompanied the holydays, have not tended to improve the general aspect of trade. We report the amount sales as follows: 25 a 7¾; 18 a 7¾; 24 a 8c; 53 a 8¼; 72 a 8¼c; 120 a 8 7-8; 874 a 9c; 29 a 9¼; 659 a 9¼; 355 a 9 3-8c; 1275 a 9¼c; 135 a 9 5-8; 612 a 9¾; 45 a 9 7-8; 309 a 10c; 81 a 10½; 185 a 10¼, and 79 at 10¼ cts. per lb. 135 bales Sea Island were disposed of at 25 to 50 cts. per lb. An animated demand existed throughout the week for Rice, and prices, although not materially better are nevertheless well sustained. The stock on hand is small, and the arrivals of the article light. We report sales of 1843 tierces at from $2 3-8 to $3 1-2 per cwt. 12000 bushels Rough Rice were disposed ofat from 77 to 82 c. per bu. Four cargoes of Corn were received this week, and part disposed of at 60 cents per bushel.

At Nashville, Dec. 23, Cotton sold slowly at 7 cts. The following are the rates of Exchange:—Checks on the East, for the notes of the Principal Bank of Tennessee 3¼ per cent prem., other Eastern funds, 5 to 7 per cent prem. in currency; Kentucky 4 a 5 prem., Indiana, Illinois and Ohio, 3 a 4 prem.; N. Carolina par a 2 dis.; Virginia 2 a 3 prem; Silver 6 a 7 prem; Gold 8 a 9prem; Alabama, Huntsville, 4 a 5 pr.; other branches, par; Mississippi Union P. Notes 4 a 5 dis.

At New York, on Friday, the stock market was dull, tho' U. S. Bank shares improved a shade. Prices:—U. S. Bank, 77½. Del. and Hudson 70 3-4 a 72; Kentucky 53a55; Vicksburg 28; Ohio Trust 86. The sugar market was put to the test by an offer of 800 hhds. fair N. Orleans new crop by auction. About one-fourth of the quantity was sold at 5 1-8 a 5¼ cents fair quality, and the sale stopped. It is hard pushing any thing just now.

At New Orleans, on the 21st, the stock of Cotton was 136,854 bales—the sales of the week were about 20,000 bales, and the market closed on the 21st ult. with the following quotations: *Liverpool Classification*—Louisiana and Miss.—ordinary, 6¼a6¾; middling, 7 3-4a8; fair, 8 3-4a9; good fair, 9 3-4a10; good and fine, 11. Tennessee and N. Alabama—ordinary, middling, fair, good fair, good and fine, 6¼ a 9 extremes. Flour sold during the week as high as $7, but fell back on the 20th to 6¼a6 3 4; Corn sold at 55c.

At Mobile, on the 21st, the stock of Cotton was 18,671 bales, and the week's sales 6000 bales at 8 3-4 for middling fair to 10c for good and fine. In Produce business there was still great dullness. Western flour was held at $8.

At Richmond, Flour was $6 3-4. Wheat $1,10 to $1,15. Nothing doing in Corn; prices nominally the same as last week. Prices of Tobacco as formerly; very little doing.

At Philadelphia, Dec. 28th, sales of 100 bales Cotton at 12 to 13c per lb. for Mobile, New Orleans and Upland Cotton. Flour and Meal, holders generally ask 5,62½ for good brands, while some are willing to sell at 5,50. In rye flour no further sales. Corn Meal is held at $3,50 in bbls. Sales from store of fair to prime red Wheat at 1,12½a1,16, and while at 1,18. Sales of rye at 68a72c for Southern and Pennsylvania. Corn Southern flat yellow at 54a53c, and white at 51c for new. No old in market. No arrivals of Oats; sales from store at 31c. A sale of good Kentucky Hemp at $145 per ton, on time. About 300 Beef cattle were offered and part sold, at $6 to 8,25 per cwt. Sales of Cows at previous rates, viz: $24 to 38 per head. Prices of Hogs have improved; sales at 6,75 to 7,25 per cwt. 800 Sheep at market; sales of Lambs at 1,50a2,50, and Sheep 2,75 to 4,50.

PRICES IN THE BALTIMORE MARKET.

Ashes—Slacked,		10	
Bricks—			
Run of kiln per M.		$6	5
Hard or arch		7	00
Red or paving	8 50a	9	00
Coffee—Ha. lb.	9¼a	11¼	
Rio	10 a	12	
Cotton—N. Car. lb.	12 a	13	
Virgin. good, lb.	00 a	00	
Upland,	12 a	00	
Alabama	00 a	00	
Louisiana, pri.	12 a	13	
Mississippi	a	15	
Feathers—			
Am. geese, lb.	48 a	50	
Fish—			
Shad, No.1, tri. bl.	11	75	
Herrings	5	25	
Flour, &c.—			
City Mills, sup. bbl.	5	50	
Howard st. do	5 25a	5	37
Susquehan.	0	00	
Rye	—— a	——	
Corn meal, kl. d. bbl.	0	00	
do. hhd.	00	00	
Chopped Rye 100lb.	1	62	
Ship stuff, bush.	36a	00	
Shorts,	13 a	14	
Grain—Wheat, white	1	10	
Wheat, pri. red	1 00a	1	07
Rye, new	55 a	00	
Corn, white, new	45 a	46	
do yellow	47 a	48	
Oats	29 a	30	
Beans, white	1 25a	1	37
Peas, black eye	1 12a	1	20
Naval Stores—			
Pitch, bbl	2 00a	2	55
Tar,		2	12
Plaister Paris—			
Cargo, ton,		3	50
Ground, bbl.	1 37a	1	50
Sugars—			
Hav. wh. 100lb.	11 a	12	00
do brown	8 00a	8	50
N. Orleans	6 00a	8	70
Lime—Burnt,	35 a	40	

Provisions—			
Beef, Balt. mess,	15	00	
Pork, do do	15	75	
do prime	14	00	
Bacon, Balt. ass. lb.		10	
Hams, do cured		11	
Middl'gs, do do		9	
Shoulders, do do		8	
Lard, West. & Balt.		11	
Butter, Wes. No.3,		13¼	
do do "2,		17½	
do Glades "1,		22	
Cheese, in casks, lb.	9a	12	
Rice—pr 100 lb.	4 00a	0	00
Salt—Liv. gr. bush.	33a	35	
Seeds—Clover do.	8a	10	00
Timothy do.	2 00 a	2	50
Teas—Hyson, lb.	56a	1	00
Y. Hyson	37a	74	
Gunpowder	60a	1	00
Imperial	55 a	60	
Tobacco—			
Com., 100lb.	4 50a	5	00
Brown & red	6 00a	6	50
Ground leaf	5 50a	8	00
Or. to mid. col.	9 50a	12	00
Col. to fine red	9 a	12	00
Yel. to fi. yel.	10 00a	15	00
Wrappery, suitable for segars,	10 00a	20	00
Virginia	6 00a	10	00
Ohio	8 50a	10	00
Kentucky	6 00a	13	00
St. Domingo	13 00a	18	00
Cuba	15 00a	30	00
Wool—			
Am. Sax. fleece, lb	60a	70	
Full bld. Merino	50a	55	
1-3 & ¾ do.	42a	47	
native & ½ do.	37a	42	
pulled, lambs		35	
unwashed	25a	33	
S. Ame. clean		25	
Sheep skins, each	25a	30	
Wagon freights—			
To Pittsburgh 100lb.	1	25	
To Wheeling,	1	50	

Tobacco—The transactions this week have been quite limited, though there is a disposition evinced by shippers to buy. Holders, however, are not anxious to sell, and the sales are therefore confined to small parcels of Ground Leaf within the range of our quotations, viz. inferior $3.50a$4; common $4.50 a $5; good $5.50 a $7, and fine and leafy, $7.50a$8.50. Ground Leaf is still held at $5 a $8, as in quality The inspections of the week comprise 172 hhds. Maryland, and 34 hhds. Ohio—total 206 hhds.

Howard-street Flour—There has been but little animation in the flour market during the week. The uniform asking rate from stores continues at $5.50, but we have heard of no sales at that price. Sales of several hundred barrels were made yesterday for shipment Eastward, at $5.37½. The wagon price is $5.25.

City Mills Flour—There have been sales of several large parcels for export at 5.50, and one sale at $5,56¼.

Wheat—Early in the week there were a few sales of red at $1 a $1.06 a $1.07 for common to prime, but since then the supplies by water have ceased, and we have no recent sales to report. There are no receipts by wagons.

Corn—Early in the week sales of new white Corn were made at 45 a 46 cents, and of yellow at 47 a 48c. The cold weather since then has cut off further supplies, and the receipts for the season are at an end. We note a sale of old Virginia yesterday at 55c from store; and a parcel of new yellow, for mealing, has also been sold from stores at 55c.

Rye—Our last quotation was 55 cents.

Oats—The last sales were at 30 cents.

Cattle—Of Beef on the hoof the supply in market during the week has been abundant, and the prices paid ranged from $6.50 for inferior to $8 per 100 lbs. for prime Cattle. The supply of Live Hogs offered this week in market has been large, amounting to about 1000 head. They have been generally held by drovers at $5.75 to $7 per 100 lbs. None have been yet taken by the packers, so far as we are advised, but we note a sale of a lot of 200 this week to butchers at $6.62½. Several large droves are now within a short distance of the city. Wagon Pork of prime quality sells at $6.50 to $6.75.

Cotton—We note sales 116 bales prime Uplands at 12 cts; of a parcel of Florida at 11¼a12 cents, and of prime old Uplands at 12¼ cents.—*American.*

ROHAN POTATOES.

The subscriber has received from C. N. Bement, Esq. a few bbls. of this celebrated Potatoe—They have been procured for the accommodation of those who wish to try them on a small scale, and in order to ensure the genuine article, ordered from the above named celebrated agriculturist. Apply at the office of the American Farmer, corner of Baltimore and North sts. to

no 20 SAML. SANDS.

PLASTER.

17 tons ground PLASTER in bulk
20 bbls do. do. will be sold at one dollar per bbl. if taken from the warehouse immediately. Apply to

WILLIAM CHILD,
ja 1 3t* No. 88 South street, Bowly's whf.

CORN, COTTON, & GENERAL SEED PLANTER.

The attention of the public is called to the above machine, which has lately been improved, and a patent applied for by Mr. George Page, of Baltimore. This machine is an entire new article; it has been fully proved, and found to answer for the planting of Corn, Cotton, Beets, and all Garden seeds; it will drop and cover to any depth required, one acre of land in one hour, or ten acres in a day, which is the work of 20 men; the seed in this machine is covered by falling into the furrow of the soil, which is finely pulverized by a row of cultivator teeth—no sods, weeds or stones can intrude, as in the case of a drag that has heretofore been used to haul the dirt on to the seed—neither is the seed ever disturbed by the drag, but remains where it is dropped. Satisfactory references can be given as to the operation of the machine. ☞The above machines are now ready for exhibition and sale at EDWARDS & COBB'S,

No. 7 N. Charles st., or over Mr. Thomas' turning shop in Lexington street, above Liberty, by GEO. PAGE. de 18 6m

MORUS MULTICAULIS, FRUIT TREES &c.

100,000 Morus Multicaults trees, or any other reasonable quantity or of cuttings, are now offered for sale. The trees are genuine; all being raised by the subscriber, either at his Nursery here, or at his Southern establishment, at Portsmouth, in Lower Virginia. Also the Elata, Canton, Broussa, Moretti or Alpine, &c. &c. Fruit trees of all the different species; and of the most celebrated and surpassing kinds; the collection now offered is large.

The Catalogue of Fruit and Ornamental Trees and Shrubs, Roses and Herbaceous Flowering Plants, for 1839, is ready, and will be sent to all who apply. In that Catalogue, the very best kinds of fruit, so far as proved, are particularly designated by a Star.

All orders will be promptly attended to, and trees, when so ordered, will be securely packed for distant places.

WILLIAM KENRICK.
Nonantum Hill, Newton, Mass. Oct. 1839—nov 6 29t

HUSSEY'S REAPING MACHINE,

Will be made to order by the subscriber, (the patentee,) in Baltimore. Price $150. A machine is warranted to cut fifteen acres of any kind of grain in a day, if well managed; to cut the grain cleaner, and leaves it in better order for binding, than is usually done by the cradle. It is supposed to be equally adapted to the cutting of rice by those who are acquainted with its cultivation. Machines ordered for this purpose will be furnished with broad treadwheels suited to soft ground. The demand became so great last year, at the approach of harvest, that a sufficient number of machines could not be made in time. From the high reputation which they earned for themselves in the harvest, added to their former character, a great demand is anticipated. As the expence of manufacturing is heavy, and a failure of the wheat crop would probably prevent a sale of machines, it is my design to limit the manuacture to the number positively ascertained to be wanted. Farmers are requested on this account to send their orders as early as practicable. nov 20 6m* OBED HUSSEY, Baltimore.

FOR SALE—*The following thorough-bred STOCK,* the pedigree of each to be furnished in full:

No. 1. Dark brown Stallion by Tariff, out of Belinda, by Miner's Escape, he by Impt. Horns.

No. 2. Dark brown Mare by Tariff, dam by Dr. Thornton's Richmond, g. d. by Potomac.

No. 3. Bay Mare by John Richards, dam by Defiance, g. d. by impt. Trumpetta, by Trumpator.

No. 4. Filly, 3 months old, by imp. Telf, out of No. 2.

No. 5. Bay horse Colt, 2 1-2 years old, out of No. 3, by Paul Clifford, he by Eclipse out of Betsey Richards.

No. 6. Bay Filly, out of No. 2, by Ace of Diamonds.

No. 7. Filly, 6 months old, out of No. 3, by Paul Clifford.

Resides other stock of rather an inferior quality.

Persons wishing to purchase any or all of the above mentioned stock, will address STEVENS T. MASON, Selma, near Leesburg, Va. saying what terms will be most agreeable, as they can be made to suit the purchaser. JAMES GRAHAM, jr. Agent.
de 11 3t*

AGRICULTURAL IMPLEMENTS.

John T. Durding & Co. encouraged by the favors shown them in the past year, are determined to offer no article to their friends but such as they can warrant, made of the very best materials, finished in a superior manner, of the newest patterns, and at liberal prices.

From John T. D.'s long experience in the manufacture of these articles he flatters himself that he can give entire satisfaction to those farmers, Commission Merchants, Captains and others who may favor him with their orders. J. T. D. & Co. wish especially to recommend a lately improved and superior "Wheat Fan" as being admirably adapted to clean effectually and fast—price $25 They invite the attention of the public to their stock of Castings for ploughs or machinery, by the lb. or ton at the lowest prices. Also on sale, New York ploughs, No. 10 1-4 at $3, No. 11 1-4 at 3 25, No. 12 1-4 at $3 75. Repairs in general done with neatness and despatch.

All orders for field and garden seeds, of the best kinds and fresh, will also be furnished at our Agricultural Establishment, upon the usual terms, by Thomas Denny, seedsman, Grant St. Balimore, near of Messrs. Dinsmore & Kyle. may 29

MAHOOL'S IMPROVED VIRGINIA BAR-SHARE PLOUGH.

From One to Four Horses—Constantly on hand, for sale at No. 20 Cheapside. These Ploughs are made of the best materials—oak beams and handles, wrought iron bar laid with steel, and can be repairedby any country smith. My tf R. M. I'ANSON, Agent.

EVANS' PATENT SELF SHARPENING PLOUGHS, HARVEST TOOLS, &c.

The subscriber is now manufacturing C. & O. Evans' reverse point or self sharpening PLOUGHS; each share (of cast iron) has two points; and, by reversing act upon the principle of self sharpening, and therefore economy in using. These ploughs are made of the best possible manner, and will be sold on as reasonable terms as can be had in this city; together with my extensive assortment in other make of ploughs, and agricultural implements generally.

In store, very superior Pennsylvania made Grain CRADLES, with Waldron's & Griffin's Blades; Grain and Grass SCYTHES of Waldron's, Griffin's and American manufacture; Scythe Snathes and other harvest tools; Threshing Machines; Horse powers, &c.

I have also patterns for, and have made some splendid Cast Iron Railings for private dwellings and Lamp Posts, and would invite those wanting such articles, to call and see my work.

All orders will meet prompt attention. J. S. EASTMAN,
May 15. 36 Pratt st. between Charles and Hanover sts.

ROBERTS' SILK MANUAL.

The Fourth edition of this popular work is now published and ready for delivery. It contains upwards of 100 large octavo pages, and embraces every information needed by the silk culturist from the planting and rearing of the mulberry to the making and dyeing of Sewings & Twists; the plan of constructing cocooneries, feeding shelves, the process of feeding the worms, ventilation of their apartments, apportionment of food, and in fine, every thing necessary to the acquisition of a silk culturist is lucidly treated. A large edition has been nearly disposed of since about the 1st January, and the present has been issued to supply an order from the legislature of Pennsylvania for a considerable number for gratuitous distribution in that commonwealth, by the recommendation of the committee on agriculture, who gave it their decided approbation and recommendation over every other work published on the subject. The late Governor of Maryland also recommended it in a special message to the legislature, for distribution among the people, and it also received the commendation of the committee on agriculture of the H. of R. of the Congress of the U. S. A large edition is now published, and all orders from a distance can be promptly filled. A liberal discount will be made to the trade. Price 37 1-2 cts. per single copy. Address S. SANDS, Balti. Md.

FARMING IMPLEMENTS, SEED, &c.

ROBERT SINCLAIR JR. & CO., (Light street, near Pratt street wharf,) since the last season have added several new patterns to their assortment of PLOUGHS, and now offer for sale a stock which comprises all the variety of forms, improvements and sizes, which they conceive to be essential to the various wants of the farmer, and will be sold by wholesale or retail, at as low price as articles of equal value can be afforded in this market.

EXTRA CASTINGS, for Ploughs and Agricultural Machinery furnished at reduced prices.

CYLINDRICAL STRAW CUTTERS, at $30 a $75 each.		
Ray's & Green's Patent	Do	$20 a $30 each.
Evans & Botts Do	Do	$12 a $35 "

☞EXTRA KNIVES will be furnished with the above if required.

CORN SHELLERS, for hand power, at $15 to $1 each.

Wright's Patent Do. (for horse power, $60) a most excellent machine, guaranteed to shell 150 bushels of Corn per hour.

VIRGINIA CORN & COB CRUSHERS, warranted strong and durable, price $65.

MULLER'S CORN MILLS, 3 sizes at $30, $50 and $75 each.

Planetary and Common HORSE POWERS, for 2 and 4 horses, price $100 to $125 each.

THRESHING MACHINES at $50 to $85 each.

☞The above Horse Powers and Thrashers embrace great strength of material, simplicity of construcion, and made in the most substantial manner.

WHEAT FANS, made on Watkins', Rice's, and various other improved plans.

Also—Dirt SCRAPERS, Vegetable CUTTERS, Horse RAKES, ROLLERS, SOWING MACHINES, SWINGLE TREES, OX YOKES, Cider Mill Nuts, Briar Hooks, Hay Knives, and in short every other Agricultural Implement and Tool required by the most particular farmer.

GARDEN TOOLS of every description.

BOOKS on general cultivation, management of stock, &c.

Agricultural and Garden SEEDS, embracing as large and genuine assortment as is to be found in this country.

TREES and PLANTS supplied at the shortest notice from the Clarmount Nursery, near this city.

Priced Catalogues of the above establishment furnished gratis.
nov 20

UNCLE SAM—*For Sale*—Not the uncle Sam who by unskilful and wicked grooms and riders has been foundered and spavin'd until he has no one to back him at home or abroad; but Gen. Forman's Uncle Sam, full like his breeder, of pride and good blood. A magnificent bright bay, 16 hands high, by John Richards, (selected by Col. Johnson to run the great match race against Eclipse) out af an Oscar mare—See Turf Reg. v. 3, pp. 15, 321.

To close the concerns of the company he will be sold very low. Apply, post paid, to oc 30 J. S. & T. B. SKINNER.

BREEDING MARES.

We will sell, or exchange for a lot of Devon cattle, two first rate BREEDING MARES—Zedora, out of imported Alarm, by American Eclipse—This mare has proved herself a good runner, which will appear by referring to the Turf Register, and an excellent breeder; is now with colt to Duane; about ten years old. Also—Julia, out of Medoc's dam, by Count Piper. She is a large, strong mare; has not been trained; produces fine colts; is also supposed in colt to Duane, ten years old. Enquire of
nov 27 J. S. SKINNER & SON.

MORUS MULTICAULIS TREES.

A planter at the South would contract to furnish of the next year's growth, a million or more Multicaulis Trees at 10 cents per tree. For further particulars apply at the Farmer office. n 20